

FURTHER NEW SCOLYTOIDEA FROM THE TERRITORY OF PAPUA
AND NEW GUINEA. 267. CONTRIBUTION TO THE MORPHOLOGY
AND TAXONOMY OF THE SCOLYTOIDEA.

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Synopsis

In this paper twenty-nine new species of Scolytoidea are described and descriptions are given of *Cryphalus confusus* Egg. masc. nov., *Crossotarsus biconcavus* Schedl, fem. nov. and *Platypus semiopacus* Strohm., fem. nov.

INTRODUCTION

This paper is a continuation of a series on the Scolytidae and Platypodidae in the Territory of Papua and New Guinea collected by the Entomology Section, Department of Forests. All collections, except one, were made by members of the section during a survey of Scolytoidea in the Territory.

In this paper seven new species of Scolytidae, and *Cryphalus confusus* Egg. masc. nov., and twenty-two new species of Platypodidae, and *Crossotarsus biconcavus* Schedl, fem. nov. and *Platypus semiopacus* Strohm., fem. nov., are described. The numbers following the collectors name refer to the consignment number allocated to the specimens by the Department of Forests and the Department of Agriculture, Stock and Fisheries. The following abbreviations are used: E.H.D. (Eastern Highlands District), S.H.D. (Southern Highlands District), W.H.D. (Western Highlands District), Dist. (District) for other districts, D.N. (dialect name). The latter abbreviation has been employed to note the dialect name of the host plant as used by the natives in the collection area. These dialect names are usually quite reliable at the family level.

DESCRIPTION OF NEW SPECIES

(a) *Scolytidae*

CRYPHALUS ARAUCARIAE n. sp.

Piceous, 1.0 mm. long, 2.1 times as long as wide. Of about the same size as *Cryphalus papuanus* Schedl, but more cylindrical, the apex of the pronotum more broadly rounded, the disc more strongly convex, the asperities more pointed, the apical margin with four pointed remotely placed asperities, and the elytra with the vestiture more scale-like.

Front convex, moderately shining, minutely punctulate, somewhat indistinctly punctured.

Pronotum wider than long (12.4 : 11.0), postero-lateral angles rectangular and feebly rounded. the sides subparallel on the basal fourth, thence feebly obliquely narrowed, apex broadly-rounded, apical margin with four very small pointed and remotely placed asperities; summit high, anterior area steeply convex, with scattered pointed asperities on a rather wide area.

basal area long, densely granulate-punctate, with scattered fine erect short hairs, also, as far as present, with inclined fine and slender scales. Scutellum not clearly defined.

Elytra slightly wider than and 1.8 times as long as the pronotum, sides parallel on the basal half, thence gradually incurved, apex broadly rounded, declivity commencing in the middle, rather strongly convex; disc fairly shining, densely and finely punctured, the punctures of both series, the main rows and interstices of about the same size, the interstitial punctures seem to bear short, semierect hairs in the basal half of the elytra, these becoming replaced by hair-like scales towards and on the declivity (largely abraded in both specimens), between these hair-like scales with numerous minute and inclined pale hairs on the declivity.

Holotype in the Australian National Insect Collection in Canberra, one paratype in collection Schedl.

Type-locality: New Guinea, Bulolo, Morobe Dist., 22.x.1966, virgin forest in branchlets of *Araucaria cunninghamii*, B. Gray.

CRYPHALUS CONFUSUS Egg., masc. nov.

The type of *Cryphalus confusus* Egg., Treubia 9, 1927 p. 395 is a female from which we have a good series from Bulolo, Morobe District, 12.ii.1968, in stump of dead hardwood, B. Gray & Bereima. Along with several females there have been collected also some males. The latter vary in size from 2.1 to 2.3 mm., the pronotum being more triangular in outline, the anterior margin more narrowly rounded, the subapical constriction more distinct and less longitudinally convex.

Allotype in the Australian National Insect Collection in Canberra, paratypes in the collection of the Department of Forests in Bulolo and in collection Schedl.

This species has been described from southern Sumatra, and has not been recorded from other places.

XYLEBORUS ARIES n. sp.

Female—Piceous, 3.1 mm. long, 2.9 times as long as wide. More closely allied to *Xyleborus discrepans* Schedl, but much more slender, the interstices of the elytral disc uniseriately punctured, near the declivity these punctures as large as those of the main striae, the declivity more oblique, more densely covered with medium sized punctures.

Front convex, silky shining, minutely punctulate, a very short polished longitudinal carina in the centre, a few setose punctures on the anterior half, epistomal margin rimlike elevated, above with a transverse impressed line from which arise short erect bristles originating in medium sized punctures.

Pronotum distinctly longer than wide (33:31), widest short behind the centre, postero-lateral angles strongly rounded, the sides subparallel on the second fifth counted from the base, thence gradually incurved, apex rather narrowly rounded, a subapical constriction hardly noticeable apical margin armed with minute low asperities; summit distinctly before the centre, anterior area obliquely convex, very densely covered with very small asperities, basal area brightly shining and finely not closely punctured, pubescence nearly absent. Scutellum of moderate size, impunctate.

Elytra slightly wider than (32:31) and 1.8 times as long as the pronotum, widest after the basal two fifths, sides straight and feebly divergent at first, little more convergent behind, apex somewhat angulately rounded, apical

margin finely carinate, declivity commencing in the middle, very obliquely convex; disc shining, with very regular rows of medium sized punctures in subimpressed striae, interstices of moderate width, each with a less regular row of punctures being but little smaller than those of the striae, the punctuation of the disc continued on the declivity but appearing more dense and the punctures somewhat finer, the suture wide, feebly elevated, polished, with two to three remotely placed conical tubercles, two similar tubercles on the third interstices, one on the fifth.

Holotype in the Australian National Insect Collection in Canberra, one paratype in the collection of the Department of Forests in Bulolo and another one in Collection Schedl.

Type-locality: Awande, E. H. D. 12.ii.1968, in dead stump of hardwood sp., F. R. Wylie & S. Auno (nr. 10, 11).

XYLEBORUS DECLIVISPINATUS n. sp.

Female—Fusco—ferrugineous, elytra darker, 4.5 mm. long, 2.2 times as long as wide. This new species might be placed close to *Xyleborus superbus* Schedl, but is much smaller, has no longitudinal impression on the elytral declivity, the latter being very obliquely convex, and armed with serrations and spines.

Front feebly convex, silky shining, minutely punctulate, longitudinally wrinkled and coarsely punctured, with a median wide polished and longitudinal callosity commencing on the anterior margin and extending to the centre, the wrinkles and punctures fading away towards the vertex.

Pronotum slightly wider than long (14.7 : 14.0), subquadrate, posterolateral angles measuring little more than 90 degrees and very feebly rounded, sides slightly divergent on the basal third, thence feebly and obliquely narrowed, apex nearly transverse when viewed from above, antero-lateral angles well developed, anterior margin with very low and wide asperities and shallowly arcuate in the middle; summit very high, situated in the centre of the pronotum, anterior area very steeply convex, subperpendicular in front, very densely covered with rather small asperities, these asperities gradually changing to small punctures on the basal area, pubescence sparse and erect.

Elytra slightly wider than (15.3 : 14.7) and 1.5 times as long as the pronotum, widest in the middle, the sides feebly divergent on the basal half, to the same extent convergent behind, apex very broadly rounded, declivity commencing in the middle, very obliquely convex; disc shining, striate-punctate, the striae distinctly impressed, the striae punctures of moderate size (on the first striae coarser) and not closely placed, the interstices plano-convex, polished and subimpunctate; on the declivity the striae punctures very large but hardly impressed, transverse, and very closely placed, the interstices 1 (not regular), 2, 3, 4 and 5 ceasing on the commencement of the declivital face with a short pointed tubercle, on the declivital face the first interstices (the suture) very narrow above, with a row of closely placed pointed tubercles increasing in size towards the apex below, the second interstices reduced to a narrow line above, narrowly elevated and armed with a few larger tubercles below, their size decreasing from the middle of the lower half of the declivity towards the apical margin, the third interstices reduced to a narrow zig-zag line but bearing in the upper third a smaller conical tooth thence a very large somewhat curved spine, the fifth interstices also reduced to a narrow line throughout, the seventh and ninth each with a row of pointed teeth increasing in size on the upper part of the declivity, the apical margin with numerous pointed tubercles.

Holotype in the Australian National Insect Collection in Canberra, paratypes in the collection of the Department of Forests in Bulolo and in collection Schedl.

Type-locality: New Guinea, Karamui, Chimbu District, 12.vi.1968, boring into log Derebe D.N. "ME" and boring into freshly fallen log Derebe D.N. "Sawodisay", B. Gray (nr. S204, S218).

XYLEBORUS INCERTUS n. sp.

Female.—Piceous, legs testaceous, 2.1 mm. long, 2.1 times as long as wide. Closely allied to *Xyleborus consimilis* Egg., probably a local form of it, but smaller, the pronotum more cylindrical in the basal two fifths, elytra feebly more elongate, the declivity less shining, the interstices smooth except the fine tubercles on the third and fifth.

Front convex, subopaque, minutely punctulate, also with shallow large punctures from which arise long setae, a fringe of such hairs also along the epistomal margin. Eyes stout, narrowly emarginate in front.

Pronotum but slightly longer than wide (29:28), widest short behind the middle, postero-lateral angles rounded, the sides but feebly divergent on the basal third, thence gradually incurved, apex moderate broadly rounded, subapical constriction merely indicated, apical margin with numerous small and closely placed asperities; summit in the centre, convex and densely covered with small asperities in front, finely and sparingly punctured behind, pubescence sparse and erect. Scutellum large, triangular and polished.

Elytra but slightly wider than (29:28) and 1.4 times as long as the pronotum, widest in the middle, the sides subparallel on the basal half, very little incurved behind, apex very broadly rounded, apical margin finely carinate up to the seventh interstices, declivity commencing in the middle, rather strongly, obliquely convex; disc shining, with fairly regular rows of punctures, those near the suture being somewhat larger, at the sides smaller and more remotely placed, the interstices rather wide, each with a row of setose punctures not quite as large as those of the main rows, the punctures replaced on the interstices 1, 3, and 5 by small pointed setose granules towards and on the upper part of the declivity, usually the last granules on the first interstices and two lower ones on the third interstices larger, declivital face with the punctures of the main rows large and situated in impressed striae, the suture feebly convex and somewhat elevated, the third interstices more strongly so, the second feebly impressed, subimpunctate above, usually with one minute pointed granule below.

Male.—Smaller, somewhat hump-shaped, 1.7–1.8 mm long, twice as long as wide.

Front rectangular before the eyes, feebly convex, silky shining, minutely punctulate, also a few fine punctures with long fine setae.

Pronotum about as wide as long, postero-lateral angles rounded, the sides subparallel in the median third, apex very broadly rounded, so that the antero-lateral angles become rather distinct, longitudinally rather feebly convex, in the anterior half more strongly so but without a distinct summit, surface subshining, minutely punctulate, anterior half with extremely small asperities which are of the same size all over, but gradually disappearing on the basal half, Scutellum polished, of moderate size.

Elytra distinctly wider than and 1.8 times as long as the pronotum, widest after the basal fifth of the elytra, thence feebly convergent, apex rather abruptly broadly rounded, declivity commencing after the basal two fifths,

gradually obliquely convex, disc with the punctuation similar as in the female, the declivity more oblique, the apical margin more narrowly rounded, without any impressed striae, the stria punctures reduced in size, rather small, the suture and the third interstices less elevated, the longitudinal sulci along the second interstices shallow, on the first and third interstices with some fine punctures bearing short setae.

Holotype and *allotype* in the Australian National Insect Collection in Canberra, one male and several females paratypes in the collection of the Department of Forests in Bulolo and in collection Schedl.

Type-locality: New Guinea, Jimi Valley Rain Forest, W.H.D., 19.iv.1968, boring stem *Harpullia* sp., F. R. Wylie & S. Kaoko (nr. S273, S274).

XYLEBORUS PERPLEXUS n. sp.

Female. Piceous, 4.9 mm. long, 2.2 times as long as wide. Closely allied to *Xyleborus insulindicus* Egg. but smaller, the elytra less shining, the interstices on the upper part of the declivital convexity densely granulate-punctate, densely covered with shallow disclike punctures below, and the rim-like raised apical margin of the declivity extending higher up on the sides.

Front convex, silky shining, minutely punctulate, remotely and rather finely punctured, the punctures bearing medium long semierect hairs.

Pronotum as long as wide, widest at the commencement of the basal third, postero-lateral angles broadly rounded, the sides feebly divergent on the basal third, thence gradually and rather strongly incurved, apex rather narrowly rounded, apical margin with numerous extremely low but wide asperities, summit distinctly behind the centre, rather high, anterior area vary obliquely convex, very densely covered with low and rather small asperities, these gradually changing into fine transverse scratches on the basal area, pubescence restricted to the sides and the anterior area, moderate long and erect. Scutellum small, impunctate, polished.

Elytra distinctively wider than (65:59) and 1.6 times as long as the pronotum, widest close to the postero-lateral angles, sides nearly straight, apex abruptly incurved and very broadly rounded, declivity commencing after the basal third of the elytra, more slightly sloping above, steeper below, apical margin rimlike elevated up to the seventh interstices; disc short, shining, with rows of small punctures in hardly impressed narrow lines, interstices very wide, finely and irregularly punctured, the density of the punctures corresponding to about a double row; after the basal third of the elytra the punctuation of the interstices becomes more dense and at least some of the shallow punctures are being replaced by very small setose granules, the stria punctures becoming little larger and more disc-like, in the lower part of the declivity the punctuation more confused, the minute granules less abundant.

Holotype in the Australian National Insect Collection in Canberra, paratypes in the collection of the Department of Forests and in collection Schedl.

Type-locality: Kerevat, New Britain Dist., 8.v.1968, ex fallen log *Pometia pinnata*, F. R. Wylie (nr. S155).

New Guinea: Tari Sawmill, S.H.D., 5.vi.1968, boring into freshly cut *Araucaria cunninghamii* logs, B. Gray (nr. S168). Kum, 11 miles from Mt. Hagen, W.H.D., 8.vi.1968, boring into freshly fallen log, Chimbu D.N. "Yumba", B. Gray & Sine (nr. S178). Kum, 11 miles from Mt. Hagen, W.H.D., 8.vi.1968, boring into fallen log Chimbu, D.N. "Muroo", B. Gray & Sine (nr. S181). Wabag, W.H.D., 6.iii.1968, in Hardwood sp., D. H. Jeffers (nr. S260).

Xyleborus persphenos n. sp.

Female. Piceous, 2.0 mm. long, three times as long as wide. A new species with a cuneiform shape of the elytra similar to *Xyleborus sphenos* Samps. from Africa, but much smaller, the elytral disc more coarsely punctured, the pointed tubercles of the declivity replaced by small granules and the first interstices without an extension at the apical margin.

Front feebly convex, subopaque, minutely punctulate, on the anterior half rather coarsely punctured and with few long setae, more strongly convex towards the vertex.

Pronotum longer than wide (21:20), widest in the middle, posterolateral angles rounded, the sides feebly divergent up to the middle, apex very broadly rounded, a subapical constriction hardly noticeable, summit distinctly before the centre, the basal part silky shining, minutely punctulate, very fine and somewhat indistinctly punctured, anterior part convex, densely covered with small asperities. Scutellum small.

Elytra feebly narrower than (20:19) and 1.8 times as long as the pronotum, sides parallel on the basal half, thence strongly cuneiform, the extreme apex very narrowly rounded, declivity commencing in the middle, obliquely convex behind; disc silky shining, minutely chagrined, with rows of rather large punctures, interstices rather narrow, transversely wrinkled, each with a median row of extremely fine punctures bearing (as far as not abraded) semi-erect yellowish hairs; declivity with the striae punctures indistinct but in impressed striae, on the interstices the punctures replaced by regularly placed uniseriate setose pointed granules, those of the third interstices somewhat larger, the apex transverse between the third interstices.

Holotype in the Australian National Insect Collection in Canberra, one paratype in collection Schedl.

Type-locality: New Guinea: Simbai, Madang District, 18.vi.1968, boring into log Simbai D.N. "Cheramde", B. Gray (nr. S185). Simbai 2,500 m., Madang District, 18.vi.1968, boring into fallen log. S.D.N. "Contrabe", B. Gray (nr. S237).

Xyleborus venustulus n. sp.

Female. Piceous, very shining 6.4 mm. long, 2.2 times as long as wide, Allied to *Xyleborus insulindicus* Egg., but more slender, the cordiform depression of the elytral declivity more strongly developed, distinctly separated from the disc above, the punctuation coarser etc.

Front narrow between the very large eyes as in *Xyleborus insulindicus* Egg., but broadly convex (not concave), rather densely and coarsely punctured below, the punctures becoming smaller and more remotely placed above, with a broad fringe of fuscous hairs directed downwards below.

Pronotum feebly wider than long (22:21), widest shortly before the base, postero-lateral angles rounded, sides feebly divergent on the basal fourth, thence obliquely incurved, with a very distinct subapical constriction, apical margin narrowly rounded and extended by a sharp erect carina; summit at the commencement of the basal third of the pronotum and fairly high. anterior area obliquely convex, very densely covered by medium sized low asperities, which become distinctly smaller around the summit and extend up to the base, with few scattered short hairs near the apex and along the side margins. Scutellum relatively small, polished, impunctate.

Elytra as wide and 1.4 times as long as the pronotum, widest in the middle, sides feebly divergent on the basal half, feebly incurved behind, very broadly rounded at the apex, the apical margin narrowly rimlike elevated and each elytron feebly separately rounded, declivity commencing short behind the basal half, anterior to it with an indistinct transverse depression of the disc, obliquely truncate, the truncate face broadly cordiform in outline and very shallowly depressed; disc shining, with rather small punctures in narrow feebly impressed lines, the striae more distinct near the suture and towards the base of the elytra, interstices fairly wide, densely and irregularly covered with punctures about of the same size than those in the main rows, the density of the interstitial punctuation corresponding to about a double row, declivital face with the stria punctures much larger but shallow, disc-like, the interstitial punctures similar but less numerous on account of the narrower interspaces, the suture feebly elevated towards the apical margin.

Holotype in the Australian National Insect Collection in Canberra, two paratypes in the collection of the Department of Forests in Bulolo, two paratypes in collection Schedl.

Type-locality: New Guinea: Jimi Valley Rain Forest, W.H.D., 19.ix.1968, boring in stem of *Harpullia* sp., F. R. Wylie (nr. S272.)

(b) *Platypodidae*.

CROSSOTARSUS ABDOMINALIS n. sp.

Male—Piceous, brightly shining, 9.1 mm. long, 2.7 times as long as wide. The largest species so far described of the *Crossotarsi barbati* and easily recognized by the apex of the elytra on which none of the interstices is produced into a spine or blunt process.

Front flat, shining, coarsely punctured towards the antero-lateral angles, similar punctuation within the eyes above, the punctures becoming smaller towards the vertex which is separated from the front by rather acute angles, in the centre with an impressed striga, shortly beneath a low polished and impunctate elevation from which extend feebly raised transverse lines towards the insertion of the antennae, a longitudinal impunctate space from the central striga to the vertex; a short erect pubescence restricted to the antero-lateral angles and on the extreme sides above.

Pronotum little wider than long (24:22), lateral femoral emarginations shallow, disc brightly shining, sparsely and very finely punctured, median sulcus fine and short, continued anteriorly by a fine impressed line, a row of large setose punctures along the anterior margin.

Elytra but little wider than (26:24) and 1.8 times as long as the pronotum, widest short behind the basal half, sides very feebly convergent towards the base, a little more so towards the apex, the latter transverse and wide, very feebly convex towards the suture, postero-lateral angles well defined and rectangular; disc shining, feebly convex in the distal half, very finely striate-punctate, the striae very narrow, the stria punctures extremely fine and very closely placed, the interstices very wide, nearly impunctate, but with some crowded larger punctures short before the apex, the declivity indicated by a sub-perpendicular narrow lunate face which is impunctate and separated from the posterior part of the declivital disc by an impressed arcuate line.

Abdomen opaque, ascending, last sternite with a very large triangular tooth on each side near the lateral border.

Female—little larger than the male, 9.5 mm. long, but with similar proportions, front broadly impressed between the eyes, brightly shining and minutely punctulate towards the vertex, coarsely and densely punctured and with erect reddish pubescence on the antero-lateral angles, the punctures fading out along a broad median longitudinal space and towards the eyes on the sides, a seam of long bristles along the inner edge of the eyes, a very gradually raised line extending from the center to the vertex in the middle, separation of vertex and front angulately rounded, when viewed from above feebly biconcave. Antennal scape more elongate than in the male, about 1.5 times as long as wide. Pronotum as in the male, the elytra little more convex behind, the strial punctures less distinct, interstices 3 and 5 feebly elevated and finely granulate on a rather long space before the base, the striae and strial punctures fading away towards the apex, the interstices becoming silky shining, minutely punctulate and each with a short row of minute inclined hairs, the perpendicular lunate face of the declivity similar as in the male but more coarsely sculptured. Abdomen convex, opaque, without any armature.

Holotype, allotype in the Australian National Insect Collection in Canberra, paratypes in the collection of the Department of Forests in Bulolo and in collection Schedl.

Type-localities: New Guinea: Karamui, Chimbu District, 11.vi.1968, boring into fallen log. Derebe D.N. "Sape", B. Gray (nr. S191).

Karamui, Chimbu Dist., 12.vi.1968, boring into fallen log. Derebe D. N. "Pnugusea", B. Gray (nr. S198). Karamui, Chimbu Dist., 12.vi.1968, boring into freshly fallen log. Derebe D.N. "Sapae", B. Gray (nr. S207). Karamui, Chimbu Dist., 12.vi.1968, boring into fallen log Derebe D.N. "Sauroo", B. Gray (nr. S211). Karamui, Chimbu Dist., 12.vi.1968, boring into fallen log Derebe D.N., "Waade", B. Gray (nr. S214). Karamui, Chimbu Dist., 12.vi.1968, boring into freshly fallen log Derebe D.N. "Carpburu", B. Gray (nr. S220). Karamui, Chimbu Dist., 13.vi.1968, boring into fallen log. Derebe D.N. "Spa're", B. Gray (nr. S228).

CROSSOTARSUS BICONCAVUS Schedl, fem. nov.

Female—Piceous, 8.6 mm. long, 3.3 times as long as wide. General shape, proportions and even details of the sculpture very similar to *Crossotarsus mniszechi* Chap. except the antennal scape, which is much more slender, about three times as long as wide, forming an equilateral triangle and bearing on its upper edge a flat, slender and inwards directed appendage instead of the small pointed tooth in *Crossotarsus mniszechi* Chap. The pubescence of the front, usually abraded, consists of a plush of curled hairs on the lower outer parts of the frontal cavity, a seam of similar downwards curled hairs along the carina separating the front from the vertex, a seam of still longer hairs on the lower secondary carina on the sides and a seam of long hairs along the outer edge of the antennal scape.

The description is based on three specimens with complete pubescence, formerly erroneously identified as *Crossotarsus mniszechi* Chap. in my collection, originating from the following localities: Papua, Kokoda, 1300 ft, ix.1933, L. E. Cheesman; N.E. Papua, Mt. Lamington, 1300–1500 ft, C. T. McNamara; N. Guinea, Simbang, Huon Gulf. 1899, Biro.

A good number of females received from Mr. Barry Gray from various localities compare very well with these three specimens, but their pubescence is more or less abraded so that they can hardly be used for designation as types.

CROSSOTARSUS SUBOPACUS n. sp.

Male—Piceous, shining, 4.9 mm. long, 3.1 times as long as wide. Of a similar general shape as in *Crossotarsus lacordairei* Chap. but larger, the elytral declivity somewhat more sloping, opaque, the strial punctures reduced to obsolete, the interstices with remotely placed minute punctures bearing long fuscous hairs and the sutural angles on each side of the emargination not rounded but pointed.

Front flat, minutely chagrined, covered with somewhat remotely placed medium sized punctures bearing long semierect setae, feebly angulate towards the vertex.

Pronotum wider than long (42:39), widest before the moderately deep femoral emarginations, disc fairly shining, minutely chagrined, irregularly covered with small punctures of varying size, median sulcus long but very fine.

Elytra distinctly wider than (42:39) and 1.9 times as long as the pronotum, sides subparallel on little more than the basal half, apex angulately rounded, with a similar triangular sutural emargination as in *Crossotarsus lacordairei*; disc shining, with regular rows of rather small but very distinct punctures, the interstices wide, each one with some irregularly placed punctures of the same size as those of the striae, these punctures more crowded near the base, especially on the feebly elevated and triangularly widened third interstices: declivity commencing far behind the basal half of the elytra, obliquely convex, opaque, the striae reduced, entirely fading out towards the apical margin, each interstice with a regular row of minute punctures bearing long fuscous hairs more prominent in the upper half of the declivity. Abdomen horizontal.

Female—but little larger than the male, of similar proportion, coloration, shape and sculpture of the front and the pronotum; the elytral declivity more uniformly convex, opaque like in the male, the striae and strial punctures becoming entirely obsolete behind, the interstitial punctures still smaller, the pubescence very sparse and short, apical margin broadly rounded without the sutural emargination of the male.

Holotype and allotype in the Australian National Insect Collection in Canberra, four paratypes in the collection of the Department of Forests in Bulolo, 1 female, 2 male paratypes in collection Schedl.

Type-locality: New Guinea: Watut Valley 1200 metres, Morobe Dist., 1.iii.1968, in fallen log of *Aglaia* sp., Bereima and S. Auno. Karamui, Chimbu Dist., 12.vi.1968, boring into freshly fallen log Derebe D.N. "Jar'kare", B. Gray (nr. S216).

CROSSOTARSUS VENTRISPINIS n. sp.

Male—Piceous, brightly shining, 3.2 mm. long, 3.3 times as long as wide. A new species belonging in the neighbourhood of *Crossotarsus nipponicus* Blandf. but much smaller, the elytra with rows of extremely fine punctures in hardly impressed lines, the sloping declivity relatively shorter and the second abdominal sternite with two spines in the middle, the upper one smaller, slender and pointed at the tip, the other one much longer, bent upwards and tridentate at the tip.

Front flat, convex towards the vertex, shallowly areolate-punctate, with some very short hairs above. Antennal scape small, feebly longer than wide.

Pronotum little wider than long (27:26), widest at the anterior extremity of the well developed femoral emarginations, the latter angulate on both sides,

disc silky shining, minutely chagrined, median sulcus long, with a row of small setose punctures along the anterior margin, a transverse band of coarser punctures near the base.

Elytra little wider than (29:27) and twice as long as the pronotum, widest at the commencement of the declivity, sides straight and feebly divergent, apex with pointed lateral extensions as usual in the *Crossotarsi subdepressi*, apical margin between these extensions transverse; disc brightly shining, with rows of very fine punctures in hardly impressed lines, declivity restricted to the distal fourth of the elytra, convex, the striae deeply impressed but without visible punctuation, interstices becoming carinate at first, gradually decreasing in height below, the entire declivity silky shining, minutely punctulate. Abdomen in the middle of the second sternite with two spines, the upper shorter one slender and pointed, the lower one much longer, bent upwards and tridented at the tip, the entire abdomen opaque.

Female—of the same colour, size and proportions as in the male, but the interstices of the elytral declivity less strongly carinate, the lateral extensions shorter and blunt at their tips, and the second abdominal sternite with a single long, slender spine being bent upwards at the tip.

Holotype and *allotype* in the Australian National Insect Collection in Canberra, male paratypes in the collection of the Department of Forests in Bulolo, a pair of paratypes in collection Schedl.

Type-localities: New Guinea: Kum 11 miles from Mt. Hagen W.H.D., S.vi.1968, boring into freshly cut log. Chimbu D. N. "Muroo", B. Gray & Sine (nr. S175). Kum 11 miles from Mt. Hagen, W.H.D., S.vi.1968, boring into freshly fallen log. Chimbu D.N. "Yumba", B. Gray & Sine (nr. S179). Wabag, W.H.D., 6.iii.1968, in hardwood sp.. D. H. Jeffers (nr. S262).

DIAPUS PUER n. sp.

Male—Castaneous, underside and legs largely testaceous, 2.8 mm. long, 3.2 times as long as wide. More closely allied to *Diapus aculeatus* Blandf., but somewhat larger, the front with a small longitudinal carina in the middle just above the epistomal margin, the antennal scape stout and flattened, the pronotum with a wide transverse band of closely placed pores along the basal margin, the three spines at the extremity of the elytra blunt, etc.

Front trapezoid in outline, widest above, flat, silky shining, minutely chagrined, remotely rather coarsely punctured, the punctures bearing medium long hairs, convex towards the vertex, the latter with the usual three polished longitudinal vitae, the median one terminating in front more abruptly thus looking like a small tubercle. Antennal scape stout, flattened, but little longer than wide.

Pronotum longer than wide (28:25), widest behind the well developed femoral emarginations, disc brightly shining, near the base with a wide transverse band of closely placed medium sized pores.

Elytra slightly wider than and 1.6 times as long as the pronotum, sides subparallel, disc horizontal, with three blunt spines at the extremity, the first one but little shorter than the second, the third obliquely connected with the side margin of each elytron, the ninth interspace indicated by a more or less distinct small and blunt toothlike extension; disc rather shining, minutely chagrined, with rows of fine and remotely placed punctures, the latter obscured on the sides near the apex, between the upper dentate margin and the lower extremity of each elytron narrowly sulcate, the lower margin

with a small pointed tooth in the continuation of the third interstices, the teeth of the upper margin with fine and long setae. Last abdominal sternite wide, feebly concave, opaque, finely punctulate.

Holotype in the Australian National Insect Collection in Canberra, 7 cotypes in the Department of Forests, Bulolo and 3 ♂♂ in collection Schedl.

Type-locality: New Guinea: Oomsis, Morobe Dist., 15.ii.1968, boring into fallen log (1 Month) of *Anisoptera* sp., B. Gray (nr. 12).

DIAPUS SPINIFER n. sp.

Male—Piceous, a transverse band near the base of the elytra castaneous, 2.3 mm. long, 4.0 times as long as wide. A peculiar new species of the genus *Diapus* easily recognised by four spines of the elytral declivity.

Front flat, silky shining, with a few coarse punctures on the antero-lateral angles and in the middle above, some other setose punctures along the convexity towards the vertex. Antennal scape long and slender, club-shaped.

Pronotum longer than wide (21:17), widest behind the strongly incurved femoral emarginations, disc shining, a punctuation nearly obsolete except a row of setose small punctures along the anterior border, median sulcus fine but rather long, the sensory pittings near the base, common in all species of *Diapus*, straight, narrow and moderately long.

Elytra as wide and twice as long as the pronotum, sides parallel in the basal half, very feebly convergent behind, apex transverse, with a lateral process on each side having the shape of a slender triangular tooth; disc shining, stria punctures nearly obsolete in the central portion, those of the first striae more distinct, sometimes also a few very fine punctures of the second row, a few such punctures also visible from other rows near the base; declivity abruptly perpendicular and rather low, apical margin broadly arcuate, at the commencement of the declivity on each side of the suture with a long and slender tooth surpassing in length the postero-lateral processes. Last abdominal sternite concave, brightly shining, coarsely punctured, the punctures near the margins bearing long fine hairs.

Female—similar in size to the male, the pronotum and elytra but slightly stouter, the head somewhat larger, the front and antennal scape as in the male, but with very large mandibular appendages, these being nearly as long as the pronotum, directed straight forward, laterally compressed, three times as long as wide, somewhat twisted near the base, the sides feebly narrowed on the anterior third and rounded, blunt at the tip. Pronotum as in the male, the elytra without any teeth at the apex, apical margin transverse, the postero-lateral angles rounded, the disc more silky shining, minutely chagrined, with rows of very fine punctures in feebly impressed striae, the interstices with scattered punctures of similar size to those of the main striae. Last abdominal sternite not quite as wide as in the male.

Holotype and allotype in the Australian National Insect Collection in Canberra, paratypes in the collection of the Department of Forests in Bulolo and in collection Schedl.

Type-localities: New Guinea: Porotop L. M. Station, W.H.D., 6.iii.1968, in *Syzygium* sp., D. H. Jeffers (nr. S253). Porotop L. M. Station, W.H.D., 6.iii.1968, in *Podocarpus* sp. D. H. Jeffers (nr. S257). Porotop L. M. Station, W.H.D., 6.iii.1968, in *Nothofagus* sp., D. H. Jeffers (nr. S258). Kum, 11 miles from Mt. Hagen, W.H.D., 8.vi.1968, boring into freshly fallen log. Chimbu D.N. "Yumba", B. Gray & Sine (nr. S176). Kum, 11 miles from Mt. Hagen, W.H.D., 8.vi.1968, boring into freshly fallen log. Chimbu D.N.

"Yumba", B. Gray & Sine (nr. S179). Kum, 11 miles from Mt. Hagen, W.H.D., 8.vi.1968, boring into fallen log Chimbu D.N. "Muroo", B. Gray & Sine (nr. S182). Kum, 11 miles from S. Mt. Hagen, W.H.D., 8.vi.1968, boring into freshly fallen log Chimbu D.N. "Da'me", B. Gray (nr. S184). Simbai, Madang, Dist. 18.vi.1968, boring into log Simbai D.N. "Cheramde", B. Gray (nr. S185). Kum, 11 miles S. Mt. Hagen, W.H.D., 8.vi.1968, boring into freshly cut log. Chimbu D.N. "Nogare", B. Gray & Sine (nr. S186).

DIAPUS PAPUANUS Schedl, *ROBUSTUS* n. sp., *ELONGATUS* n. sp. and *NANUS* n. sp.

Among the males of the genus *Diapus* known from New Guinea there are two species having the elytra horizontal, carinate at the apex, the carina extending to the postero-lateral angles, therefore arcuate at their lateral extremity and joining the side margins at their tip. The elytral declivity is perpendicular below the carina, more convex below, the apical margin broadly arcuate. The sensory pittings near the base of the pronotum are straight, narrow and rather long in *Diapus pusillimus*, much shorter, wider and arcuate on each side, with the arch directed towards the base in *Diapus papuanus* and its relatives discussed below. The main differences in the males of the *papuanus* group are manifest in the size, the proportions of the elytra and in the shape of the postero-lateral angles of the elytra, while the antennal scape is always club-shaped, the insertion of the funicle situated at the tip; in the females in the shape of the antennal scape and the mandibular appendages, while the general appearance and the sculpture of these closely allied species is very much the same. The specific differences can best be learned from the following key.

1. Sensory pittings near the base of the pronotum in both sexes straight, narrow and relatively long, male elytra with the postero-lateral angles pointed but not produced, declivity with a pointed tubercle in continuation of the third interstices near the apical border, female antennal scape club-shaped, mandibular appendages fork-like. 1.9-2.0 mm. *pusillimus* Chapuis
1. Sensory pittings near the base of the pronotum in both sexes short, wide, arcuate in each half γ^2 the arch directed towards the base of the pronotum, male elytral declivity without large tubercle in continuation of the third interstices near the apical border, sometimes with a few setose punctures below the carina 2
 $^2\gamma$ (similar to the Greek letter omega).
2. Male postero-lateral angles of the elytra drawn out into well developed triangular projections being as long as or slightly longer than the arcuate apical margin of the elytra, female not known yet. 2.6-2.8 mm.
Type-locality: New Guinea: Kum, 11 miles from Mt. Hagen, W.H.D., 8.vi.1968, boring into freshly fallen log. Chimbu D. N. "Yumba", B. Gray & Sine (S176, S179). Kum, 11 miles from Mt. Hagen, W.H.D., 8.vi.1968, boring into freshly fallen log, Chimbu D.N. "Muroo", B. Gray & Sine (S176). Simbai, Madang Dist., 18.vi.1968, boring into log, Simbai D.N. "Cheramde", B. Gray (S185). *robustus* n. sp.
- 2'. Male postero-lateral angles of the elytra angulate, sometimes pointed but without remarkable triangular extensions and shorter than the arcuate apical margin of the elytra, small to moderately large species. 1.7-2.2 mm. 3
3. Male elytra slender, 2.0-2.1 times as long as wide, female antennal scape slender and clubshaped, insertion of the funicle at the tip of the antennal scape, mandibular appendages cast off in the females available. 1.9-2.1 mm.
Type-localities: New Guinea: Marafunga 2800 m., E.H.D., 1.vi.1968, in freshly fallen log. *Cryptocarya* sp. B. Gray (S158). Marafunga 2800 m., E.H.D., 2.vi.1968, in freshly cut log *Podocarpus* sp., B. Gray (S160). Kum, 11 miles from Mt. Hagen, W.H.D., 8.vi.1968, boring into freshly fallen log. Chimbu D.N. "Yumba", B. Gray & Sine (S176). Kum, 11 miles from Mt. Hagen, W.H.D., 8.vi.1968, boring into fallen log Chimbu D.N. "Muroo", B. Gray & Sine (S182). *elongatus* n. sp.
- 3'. Male elytra stouter, 1.7-1.9 times as long as wide 4
4. Larger, 1.9 to 2.2 mm. long, female antennal scape long, triangularly widened distally, insertion of funicle at the outer corner, inner lobe large, with an appearance of long curled hairs, mandibular appendages short, much shorter than the antennal scape, somewhat fork-shaped.
Type-localities: New Guinea: Porotop L. M. Station, W.H.D., 6.iii.1968, in *Podocarpus* sp., D. H. Jeffers (S257). Porotop L. M. Station, W.H.D., 7.iii.1968, in

log, D. H. Jeffers (S265). Kum, 11 miles S. from Mt. Hagen, W.H.D., 8.vi.1968, boring into fallen log. Chimbu D.N. "Coonape", B. Gray (S183). Kum, 11 miles from Mt. Hagen, W.H.D., 8.vi.1968, "Muroo", B. Gray & Sine (182)..... *papuanus* Schedl.

- 4'. Smaller, 1.7-1.9 mm. long, female antennal scape clubshaped, insertion of funicle at the tip, mandibular appendages cast off.

Type-localities: New Guinea: Erave pine forest, S.H.D., 14.viii.1967, in log *Castanopsis acuminatissima*, B. Gray (19). Virgin Forests, Manki, 1300 m. Bulolo, Morobe Dist., 1.iii.1968, in fallen (5 months) log *Araucaria cunninghamii*, B. Gray & S. Auno & Bereima (30). Tari Sawmill, S.H.D., 5.vi.1968, boring into freshly cut log, Huri D.N. "Bia", B. Gray. Baiyer River Sanc. W.H.D., 7.vi.1968, in freshly fallen hardwood log, Baiyer dialect name "Karup", B. Gray (S173). Kum, 11 miles from Mt. Hagen, W.H.D., 8.vi.1968, boring into fallen log, Chimbu D.N. "Muroo", B. Gray & Sine (S182). Karamui Chimbu Dist., 12.vi.1968, boring into fallen log. Derebe D.N. "Pn'ugusea", B. Gray (S199). Manki Range, 1300 m.a.s.l. Bulolo, Morobe Dist., 10.viii.1968, attracted to freshly fallen *Castanopsis acuminatissima*, B. Gray (S250)..... *nanus* n. sp.

Holotypes and allotypes as far known in the Australian National Insect Collection in Canberra, paratypes in the collection of the Department of Forests in Bulolo and in collection Schedl.

PLATYPUS FASTUOSUS n. sp.

Male—Piceous, brightly shining, 5.6 mm. long, 3.2 times as long as wide. Allied to *Platypus biformis* Chap., but the elytra more coarsely punctured, the apex much more narrowly rounded, the declivity more obliquely convex, the lower part of it impunctate and the two teeth on each side more separated from each other.

Front flat, hardly noticeably impressed, densely covered with punctures of varying size, the greater part of them rather coarse, all bearing very fine and long semi-erect hairs radiating from the centre, in the latter with a small impressed striga. Antennal scape small, about one and half times as long as wide.

Pronotum feebly wider than long (13:12), widest behind the very shallow femoral emarginations, disc shining, covered with sparsely placed extremely fine punctures bearing long but very fine hairs, median sulcus moderately long and fine.

Elytra slightly wider than (14.3:13.0) and 2.3 times as long as the pronotum, widest at the commencement of the declivity, sides straight and very little divergent, gradually incurved on the distal half, apex rather narrowly rounded, declivity commencing short behind the basal half, very obliquely convex; disc shining, finely and very regularly striate-punctate, the striae punctures distinctly coarser and more closely placed on the first three rows, much finer and more remotely placed on the sides, interstices moderately wide, minutely granulate near the base, with fine setose punctures arranged in irregular rows behind, usually at least part of the pubescence abraded; towards the declivital convexity the interstitial punctures replaced by fine uniseriately arranged granules bearing longer fuscous hairs, lower half of the convexity polished, transversely impressed shortly before the apical margin, impunctate except a few setose granules on the first interstices, in the middle of the convexity on the junction of interstices three and five with a conical tooth, another but slightly smaller one on the ninth interstices a short distance behind. Abdomen ascending convex, densely and finely punctured.

Holotype in the Australian National Insect Collection in Canberra, paratypes in the collection of the Department of Forests in Bulolo and in collection Schedl.

Type-localities: New Guinea: Marafunga 2800 m., E.H.D., 2.vi.1968, in freshly cut log *Podocarpus* sp., B. Gray (nr. S161). Porotop L. M. Station, W.H.D., 6.iii.1968, in *Podocarpus* sp., D. H. Jeffers (nr. S256).

PLATYPUS MIRANDUS n. sp.

Male—Piceous, pronotum and head more reddish brown, 4.0 mm. long, 3.3 times as long as wide. This new species being a member of the *Platypus subsulcati* holds a rather isolated position especially on account of the armed fourth abdominal sternite.

Front flat, opaque, minutely punctulate, sparsely and very finely punctured, more distinctly so on the sides and towards the vertex, the punctures bearing semierect fine and long hairs, with a very fine longitudinal striga in the centre. Antennal scape small, feebly wider than long.

Pronotum longer than wide (35.0:32.5), widest at the posterior angulate extremity of the moderately deep femoral emarginations, disc shining, with scattered fine punctuation, the punctures more crowded around the short median sulcus, but not forming a distinctly limited patch as common in some species of the *Platypus subsulcati*, some setose punctures along the anterior margin.

Elytra somewhat wider than (36.0:32.5) and 1.9 times as long as the pronotum, sides subparallel on the basal three fifths, thence gradually incurved, apex broadly rounded, declivity restricted to the distal third of the elytra, obliquely convex: disc sulcate punctate, the sulci rather narrow and shallow near the base becoming deeper but not very wide behind, the punctures in the sulci indistinct, the interstices moderately wide and rather low, near the base more narrowly carinate and with some fine punctures towards the declivity, the interstices 1, 2, 4, 5 and 6 finely serrate and each with a row of short semi-erect hairs on the upper part of the declivity fading away below, the third interstice drawn out into a rather long, horizontal, cylindrical, tooth bifid at the tip, the seventh interstice forming a short carinae ceasing abruptly, declivital face opaque, minutely punctulate, with a conical tooth near the apical margin in continuation of the fifth interstice. Abdomen opaque, minutely punctulate, the fourth sternite with a transverse row of three to five conical teeth.

Holotype in the Australian National Insect Collection in Canberra, one paratype in collection Schedl.

Type-locality: New Guinea: Karamui, Chimbu Dist., 13.vi.1968, boring into fallen log. Derebe D.N. "How'wa", B. Gray (nr. S230).

PLATYPUS OPACIDECLIVIS n. sp.

Male—Piceous, brightly shining, elytral declivity opaque, 4.4 mm. long, 3.2 times as long as wide. Allied to *Platypus semiopacus* Strohm. but smaller, pronotum without regular patch of punctures around the median sulcus, elytral declivity shorter, more strongly convex and without transverse depression before the declivity.

Front flat, subopaque, minutely punctulate, with scattered very fine punctures bearing semi-erect hairs. Antennal scape stout, but little wider than long.

Pronotum little longer than wide (41:37), widest at the posterior angulate extremity of the moderately deep femoral emarginations, disc shining, polished, very sparsely and extremely fine punctured in the anterior half, the punctures rather crowded and distinctly larger behind, median sulcus long and fine, a series of setose punctures along the anterior margin.

Elytra somewhat wider than (41 : 37) and not quite 1.9 times as long as the pronotum, widest shortly behind the middle, the sides straight and feebly divergent on little more than the basal half, gradually incurved behind, apex angulately, rather narrowly rounded, declivity commencing short behind the basal half, obliquely convex; disc shining up to the commencement of the declivity, finely striate-punctate, the stria punctures very small, indistinct in part, the striae extremely narrow, interstices wide, with scattered minute punctures; declivity opaque, minutely punctulate, for a short space irregularly granulate, lower down the sparsely placed granules indicating the interstices, all granules with long semi-erect hairs, shortly before the apical margin usually with a distinct, sometimes with an obscured larger tubercle. Abdomen nearly horizontal.

Female—little larger and more elongate than the male, the apical margin of the elytra broadly rounded, the elytral declivity shorter. Front armed with two parallel longitudinal lamellae on the anterior half similar as in the allied species; the pronotum with a very large cordiform patch of closely placed small punctures surrounding the median sulcus; elytra elongate, cylindrical, declivity restricted to the distal fourth and rather strongly convex, disc brightly shining, very finely striate-punctate, the interstices very wide, subimpunctate, the base of the third and fifth triangularly elevated and finely rugose, on the declivity all interstices with not very densely placed semi-erect long hairs originating from very fine punctures, this pubescence more dense on the lower triangular and perpendicular face characteristic to the females of a great number of *Platypodids*.

Holotype and allotype in the Australian National Insect Collection in Canberra, paratypes in the collection of the Department of Forests in Bulolo and in collection Schedl.

Type-localities: New Guinea: Tari Sawmill, S.H.D., 5.vi.1968, boring into freshly cut hardwood log, B. Gray (nr. S164). Tari Sawmill, S.H.D., 5.vi.1968, boring into freshly cut *Araucaria cunninghamii* logs, B. Gray (nr. S167). Tari Sawmill, S.H.D., 6.vi.1968, boring into stem live *Macaranga* sp. B. Gray (nr. S169). Karamui, Chimbu Dist., 12.vi.1968, boring into freshly fallen log. Derebe D.N. "Carpburu", B. Gray (nr. S220).

PLATYPUS PRAECELLENS n. sp.

Male—Piceous, brightly shining, 3.8 mm. long, 4.1 times as long as wide. Closely allied to *Platypus praepositus* n. sp., but more slender, the pronotum with an elongate cordiform patch of closely placed punctures around the median sulcus, the elytral declivity shorter and the lunate face nearly perpendicular, the apical margin between the large triangular lateral processes (not visible when viewed from above) about semicircular.

Front flat, subopaque, minutely punctulate, irregularly and coarsely punctures, a median longitudinal carina extending from the centre of the beginning of the vertex, on the latter scattered setose punctures. Antennal scape small, about one and a half times as long as wide.

Pronotum longer than wide (33 : 26), widest at the posterior angulate of the well developed femoral emarginations, disc shining, with scattered very small punctures displaced rather irregularly, median sulcus long and very fine, surrounded by an elongate cordiform patch of closely placed distinct punctures.

Elytra feebly wider than (28 : 26) and 1.8 times as long as the pronotum, widest at the commencement of the declivity, the sides straight and nearly

parallel, apical margin feebly arcuate, with blunt rectangular poster-lateral angles and with blunt tubercles in continuation of the third interstices when viewed from above, when inspected from behind the ninth interstices produced into minute teeth at the outer edge of the large triangular and pointed lateral processes, between the latter semicircularly emarginate; disc brightly shining, the strial punctures extremely fine, situated in impressed lines near the base, the first row impressed throughout; the declivity short, measuring about one fifth of the total length of the elytra, abruptly convex, on the upper part of the declivital convexity the striae distinctly impressed, the interstices rugose and each with a row of short semi-erect bristles, the lower perpendicular lunate face polished, with a few setose fine punctures and separated from the upper convex part of the declivity by a low rimlike elevation. Abdomen ascending convex.

Holotype in the Australian National Insect Collection in Canberra, one paratype in the collection of the Department of Forests in Bulolo and in collection Schedl.

Type-localities: New Guinea: Porotop L. M. Station, W.H.D., 6.iii.1968, in *Nothofagus* sp., D. H. Jeffers (nr. S259). Porotop L. M. Station, W.H.D., 7.iii.1968 in log, D. H. Jeffers (nr. S268).

PLATYPUS PRAEPOSITUS n. sp.

Male—Piceous, brightly shining, 4.2 mm long, four times as long as wide. This new species might belong in the neighbourhood of *Platypus kokodaensis* Schedl, but is more elongate, the elytral disc being more finely striate-punctate, with the postero-lateral processes shorter, triangular, blunt at their tips, apical margin between the processes wider than long, trapezoid the lateral processes double notched, as in some species of the *Platypus cupulati*.

Front flat, subopaque, minutely punctulate, shallowly punctured and with some longitudinal wrinkles and a longitudinal carina in the centre, pubescence sparse, more or less restricted to the punctures near and on the vertex. Antennal scape small, not quite twice as long as wide.

Pronotum longer than wide (40:29), femoral emarginations short and moderately deep, angulate behind, disc shining, with numerous very fine punctures of varying density, median sulcus very fine and long, not quite extending to the centre.

Elytra feebly wider than (31:29) and 1.7 times as long as the pronotum, widest shortly before the middle, sides somewhat divergent at first, a little more convergent behind, the postero-lateral processes large, triangular, blunt at their tips and visible when viewed from above, the apical margin between in outline, with a short triangular extension in continuation of the third interstices of the elytra thus forming a secondary u-shaped notch at the suture; disc brightly shining, regularly striate—punctate, the striae very narrow but well impressed, the strial punctures small, elongate and closely placed, interstices moderately wide, each with some scattered minute punctures; declivity restricted to the distal two-fifths of the entire elytra, feebly convex above, the convexity with more irregularly placed coarse punctures bearing short semi-erect hairs, perpendicular face of the declivity lunate as in the allied species, the upper margin angulate but not carinate, the lunate face shining, concave, with a few setose punctures near the upper margin, the ninth interstices indicated shortly before the beginning of the postero-lateral processes by very small toothlike edges. Abdomen ascending convex.

Holotype in the Australian National Insect Collection in Canberra, paratypes in the collection of the Department of Forests in Bulolo and in collection Schedl.

Type-localities: New Guinea: Watut Valley 1200 metres, Morobe Dist., 1.iii.1968, in fallen log of *Xanthophyllum* sp., B. Gray & F. R. Wylie (nr. 26). Karamui, Chimbu Dist., 11.vi.1968, boring into fallen log. Derebe D.N. "Kero", B. Gray (nr. S193). Karamui, Chimbu Dist., 11.vi.1968, boring into fallen log. Derebe D.N. "Pn'ugusea", B. Gray (nr. S197).

PLATYPUS PRÆTERITUS Schedl.

Male—Piceous, brightly shining, 4.9 mm. long, 3.1 times as long as wide. Somewhat allied to *Platypus crassiusculus* Schedl, but smaller, the interstices 1, 4–9 not carinate towards the declivity and not produced into small spines, but gradually declivous.

Front feebly concave from eye to eye and from the anterior margin to the vertex, cavity silky shining, rather finely reticulate-punctate in the middle above, the punctures larger, more sparsely placed and with long fuscous hairs along the eyes and towards the vertex, a few more setose punctures on the sides below, the lower half more shining, minutely punctulate and sparsely covered with some medium sized punctures. Antennal scape small, club-shaped.

Pronotum slightly wider than long (39:36), widest before the moderately deep femoral emarginations, disc shining, with remotely placed very fine punctures, those along the anterior margin with long erect hairs, median sulcus fine and long extending to the centre of the pronotum, anterior to it with a cordiform patch of densely placed fine punctures looking as if pierced with a needle.

Elytra distinctly wider than long (47:39), widest at the commencement of the declivity, sides straight and feebly divergent on the basal three fifths, thence gradually and rather strongly incurved, apex rather narrowly rounded, declivity commencing short behind the basal half, obliquely convex; disc shining, striate-punctate, the striae distinctly impressed, the stria punctures extremely fine, interstices feebly convex, 2–5 finely granulate near the base, on the remaining space each with a few scattered fine punctures, interstices 1, 4 to 9 feebly serrate and with semi-erect setae towards the declivity, the second interstices drawn out into short horizontal and very pointed spines, the third ones with a similar but much shorter pointed tooth, declivital face opaque, minutely punctulate, the striae and serrations of the interstices gradually becoming obsolete, in continuation of the third interstices with a large conical spine in the lower third of the declivity. Abdomen ascending convex, densely punctured and with sparse long pubescence.

Female—Similar in size, proportions and sculpture to the male, the pubescence somewhat more dense on the front, the elytra with the striae more strongly impressed towards and on the upper part of the declivity, the interstices feebly convex, rather wide, each with a few scattered fine punctures, the third triangularly widened, somewhat elevated and densely granulate at the base, interstices 1, 2, 4, and 5 with a series of granules only; all interstices more convex on the upper part of the declivital convexity, each one with a series of minute granules bearing rather long semi-erect bristles, a small conical tubercle on the junction of interstices three and seven.

Holotype and allotype in the Australian National Insect Collection in Canberra, one male paratype in the collection of the Department of Forests in Bulolo, one pair of paratypes in the collection Schedl.

Type-localities: New Guinea: Porotop L. M. Station, W.H.D., 6.iii.1968, in *Syzygium* sp., D. H. Jeffers (nr. S254). Wabag, W.H.D., 6.iii.1968, in hardwood sp., D. H. Jeffers (nr. S263).

PLATYPUS SEMIOPACUS Strohm., fem. nov.

Female—Piceous, 4.7 mm. long, 3.7 times as long as wide. Easily distinguished from the allied females by size, the more remotely placed frontal lamellae, the rather long rugose base of the third interstices of the elytra and the subtuberculate elytral declivity.

Front flat, subimpressed in the centre, opaque, minutely punctulate, with scattered very fine punctures bearing long erect setae, somewhat longitudinally wrinkled on the sides below, a small impressed striga in the centre, with two low, rather remotely placed longitudinal lamellae on the anterior half, similar to the allied species.

Pronotum longer than wide (13.0:11.5), femoral emarginations shallow, somewhat angulate behind, disc brightly shining, with scattered minute punctures on the anterior half, the punctures a little larger towards the base, median sulcus moderately long, surrounded by a very large cordiform patch of fine and closely placed punctures, an irregular row of setose punctures along the anterior margin.

Elytra feebly wider than (12.5:11.5) and 2.2 times as long as the pronotum, the sides parallel on the basal two thirds, apex broadly rounded, declivity short, restricted to the apical third of the elytra; disc shining, with rows of hardly visible minute punctures, the interstices wide, third interstice carinate-granulate on a rather long space before the base, thence triangularly widened and granulate and connected with the fifth interstices by a granulate band, the fifth also with a short granulate carina; towards the declivity the striae punctures more distinct, the interstices each with a few minute granules bearing long semi-erect setae, the lower triangular and more perpendicular face of the declivity finely and densely punctured and densely pubescent.

Allotype in the Australian National Insect Collection in Canberra, one paratype in collection Schedl.

Type-localities: New Guinea: Porotop Lutheran Mission Station, W.H.D., 7.iii.1968, in log, D. H. Jeffers. Porotop Lutheran Mission Sawmill, W.H.D., 11.viii.1967, in log of *Podocarpus* sp., B. Gray.

PLATYPUS SEMISULCATUS n. sp.

Male—Dark reddish brown, 3.7 mm. long, 3.3 times as long as wide. Allied to *Platypus truncatigranosus* Schedl, but the pronotum with a large transversely cordiform patch of closely placed punctures, the elytra opaque except near the extreme base and the wide third interstices, the striae indistinctly punctured near the base becoming rather widely impressed and minutely rugose behind, the interstices more narrow, feebly elevated and flat on top, except the third ones which are shining, rather wide near the base, more strongly elevated and distinctly decreasing in width towards the declivity, the latter truncate as in *Platypus truncatigranosus* Schedl but the apical margin not uniformly rounded, but feebly and widely incurved near the suture, the interstices of the disc not so abruptly ceasing at the commencement of the truncate declivity.

Front flat, opaque, minutely punctulate, a few setose and fine punctures on the anterior third, a short median longitudinal striga in the centre. Antennal scape small, about one and a half times as long as wide.

Pronotum longer than wide (32:29) widest at the pointed posterior extremities of the well developed femoral emarginations, disc brightly shining, with few scattered extremely fine punctures, a series of larger and setose ones along anterior margin, median sulcus fine and long, surrounded by a large transversely cordiform patch of closely placed fine punctures.

Elytra somewhat wider than (33:29) and twice as long as the pronotum, widest at the commencement of the truncate declivity, the sides straight and distinctly divergent on the basal four-fifths, apex very broadly rounded and with a shallow impression in the centre; disc with indistinct rows of fine punctures near the base, after the basal fourth with rather wide, impressed striae being minutely punctulate, therefore of a silky texture and with clearly defined side margins, the interstices narrower than the sulci of the striae, of the same texture, the 5th, 7th and 9th with a few pointed serrations, these more closely placed near the base, the third interstices shining, wide near the base, diminishing in width towards the declivity which is obliquely truncate, all interstices becoming covered with setose granules short before the commencement of the declivity and continued on the declivital face by uniseriate rows of blunt granules, more irregularly and more densely placed below, in the middle of the declivital face in continuation of the third interstices with an acute pointed tubercle. Abdomen nearly horizontal.

Holotype in the Australian National Insect Collection in Canberra, one paratype in the collection of the Department of Forests in Bulolo, another one in collection Schedl.

Type-localities: New Guinea: Kum, 11 miles from Mt. Hagen, W.H.D., 8.vi.1968, boring into freshly cut log. Chimbu D.N. "Muroo", B. Gray & Sine (nr. S175). Kum, 11 miles from Mt. Hagen, W.H.D., 8.vi.1968, boring into freshly fallen log. Chimbu D.N. "Yumba", B. Gray and Sine (nr. S176).

PLATYPUS SPINIVENTRIS n. sp.

Male—Testaceous, head and elytral declivity somewhat darker, 2.9 mm. long, 4.1 times as long as wide. This new species may be placed in the neighbourhood of *Platypus hospes* Schedl but is easily distinguished by the irregular length of the spines of the alternate interstices at the commencement of the elytral declivity.

Front flat, convex towards the vertex, opaque, minutely punctulate, very finely and rather scattered punctured, the punctures bearing very short semi-erect hairs. Antennal scape very small, little longer than wide.

Pronotum longer than wide (23:17), widest behind the well developed femoral emarginations, disc shining, minutely chagrined, with some scattered very fine punctures, median sulcus long, extending up to the centre, in its anterior half surrounded by a cordiform patch of densely placed punctures.

Elytra distinctly wider than (21:17) and 2.3 times as long as the pronotum, widest at the declivity, sides straight, distinctly divergent towards the apex, apical margin broadly emarginate and with well developed triangular lateral extensions; disc silky shining, minutely chagrined, first row of very fine punctures in a narrowly impressed line, the others obsolete on the basal three fourths, thence becoming distinct and also in gradually impressed lines; declivity restricted to the distal fourth of the elytra, obliquely, first interstices ceasing on the upper margin of the declivity in small pointed teeth, third interstice much longer, carinate, extending a good deal over the declivital face, shaped as a slender spine blunt at its tip. fifth and seventh interstices forming together a blunt plate being but little longer than

the spine of interstice three, ninth interstice drawn out into a short tooth nearly as long as the lateral processes, the short obliquely convex declivital face dull and with a short pointed tubercle in continuation of interstice three shortly before the apical margin. Abdomen ascending, dull, fourth sternite with two pointed tubercles near the posterior border.

Holotype in the Australian National Insect Collection in Canberra, one paratype in the collection of the Department of Forests in Bulolo, one paratype in collection Schedl.

Type-localities: New Guinea: Kum, 11 miles from Mt. Hagen W.H.D., 8.vi.1968, boring into freshly fallen log, Chimbu D.N. "Yumba", B. Gray and Sine (nr. S176). Simbai, 2500 m, Madang Dist., 18.vi.1968, boring into fallen log. of S.D.N. "Contrabe", B. Gray (nr. S238). Simbai, Madang Dist., 18.vi.1968, boring into fallen log, Simbai D.N. "Cheramde", B. Gray (nr. S185).

PLATYPUS STRENUUS n. sp.

Male—Dark brown, 2.7 mm. long, 3.6 times as long as wide. Among the *Platypi oxyuri* with long and slender elytral processes, like *Platypus solidus* Walk., this new species may be recognised by its small size and the strongly striate-punctate elytra shortly before the declivital convexity.

Front flat, rugose, densely areolate-punctate, the punctures bearing minute semi-erect hairs.

Pronotum but little longer than wide, femoral emarginations short but relatively deep, disc silky shining, minutely chagrined, with some scattered very fine punctures, median sulcus fine and short.

Elytra little wider than (22:21) and twice as long as the pronotum, of the same general shape as in *Platypus solidus* Walk., fairly shining up to the commencement of the declivity, finely striate-punctate near the base, the striae strongly deepened behind, the interstices flat at first, becoming somewhat transversely convex behind and each with an irregular row of fine punctures, distal half of the elytra opaque, the striae and strial punctures fading out on the declivital convexity, the interstices each with a median row of yellow inclined hairs originating from indistinct small punctures, apical process long and slender. Abdomen ascending and convex.

Holotype in the Australian National Insect Collection in Canberra, one paratype in collection Schedl.

Type-locality: New Guinea: Togoba, W.H.D., 11.ix.1968, in stem *Eucalyptus grandis*, F. R. Wylie (nr. S271).

PLATYPUS SUBPRONUS n. sp.

Male—Fuscous, 3.2 mm. long, 3.8 times as long as wide. Closely allied to *Platypus angustior* Schedl, but the pronotum without the patch of densely placed punctures surrounding the median sulcus, the elytra more strongly narrowed behind, the declivity more obliquely convex, the tubercles close to the suture smaller and the postero-lateral processes shorter.

Front flat, faintly transversely depressed below, sub-opaque, minutely punctulate, shallowly reticulate-punctate in the upper two thirds, pubescence sparse, medium long and semi-erect.

Pronotum distinctly longer than wide (31:25), widest at the posterior angulate extremity of the femoral emarginations, disc shining, with scattered extremely fine punctures, medium sulcus long and very fine.

Elytra as wide and 1.6 times as long as the pronotum, sides parallel on the basal half, thence very gradually and slightly narrowed, postero-lateral processes slender, apical margin between them transverse, apical emargination wider than long when seen from behind; disc brightly shining, with rows of extremely fine punctures, the first row situated in an impressed line; the declivity short, restricted to the posterior third, feebly and obliquely convex, the striae punctures becoming larger and placed in impressed lines, the interstices each with a row of medium-sized punctures bearing short semi-erect setae, the narrow perpendicular face lunate, as common in this group of the genus, the upper margin distinctly carinate towards the sides, with a very small tubercle in continuation of the third interstices. Abdomen ascending convex.

Holotype in the Australian National Insect Collection in Canberra, one paratype in collection Schedl.

Type-localities: New Guinea: Watut Valley 1200 metres, Morobe Dist., 1.iii.1968, in fallen log of *Aglaia* sp., Bereima and S. Auno (nr. 21). Karamui, Chimbu Dist., 12.vi.1968, boring into freshly fallen log Derebe. N.D. "Sawodisay" B. Gray (nr. S218).

PLATYPUS UNIFORMIS n. sp.

Male—Piceous, 3.6 mm. long, 3.4 times as long as wide. Closely allied to *Platypus semiopacus* Strohm., but distinctly smaller in size, the cordiform patch of punctures around the median sulcus of the pronotum much larger and more transverse, the punctures also being more densely placed and smaller, the brightly shining part of the elytral base extending triangularly into the opaque portion, the opaque declivity more finely granulate, the tubercle on the third interstices less prominent.

Front flat, very shallowly impressed below, minutely punctulate, coarsely punctured on the antero-lateral corners, a small median strigae in the centre, convex towards the vertex, the latter with a transverse row of fine punctures bearing long erect hairs. Antennal scape small, about one and a half times as wide as long.

Pronotum about as long as wide, femoral emarginations long and deep, posterior extremity tooth-like extended and pointed, disc shining, with scattered very fine punctures, these a little larger and more crowded in the basal third, median sulcus long, surrounded by a stout (little wider than long) patch of fine, very densely placed punctures.

Elytra little wider than (31:29) and twice as long as the pronotum, widest at the commencement of the declivity, sides straight and feebly divergent on the basal three-fifths, thence gradually incurved, somewhat cuneiform, apex narrowly rounded; disc brightly shining on the basal half of the elytra, opaque behind, the shining part triangularly extended on the third interstices, with rows of extremely small punctures on the basal shining part, the interstices very wide and minutely chagrined; the declivity commencing shortly behind the middle, obliquely convex, irregularly covered with very small granules bearing long semi-erect hairs, as in *Platypus semiopacus* Strohm. Abdomen nearly horizontal.

Female—Of the same colour as the male, but somewhat larger and more slender, 4.1 mm. long and 3.5 times as long as wide. Front flat, opaque, minutely punctulate, and indistinctly, sparsely and finely punctured, the punctures bearing long fine setae, in the centre with two parallel longitudinal

lamellae as is common in the *Platypi semiopaci*. Pronotum with the patch of punctures surrounding the median sulcus much larger, the posterior extremity of the femoral emarginations angulate but not pointed. Elytra more slender, the sides parallel on the basal three-fourths, the apex short, more broadly rounded, disc shining, strial punctures obscure, interstices three and five somewhat elevated and transversely rugose near the base; declivity restricted to the distal fourth of the elytra, more strongly and uniformly convex above, with a triangular perpendicular plate below, irregularly and rather coarsely punctured above and indistinctly below, all punctures giving rise to fuscous rather long hairs.

Holotype and *allotype* in the Australian National Insect Collection in Canberra, paratype in the collection of the Department of Forests in Bulolo and in collection Schedl.

Type-localities: New Guinea: Porotop L. M. Station W.H.D., 6.iii.1968, in *Syzygium* sp., D. H. Jeffers (nr. S255). Wabag, W.H.D., 6.iii.1968, in hardwood sp., D. H. Jeffers, (nr. S262). Porotop, L. M. Station, W.H.D., 7.iii.1968, in log D. H. Jeffers, (nr. S267). Porotop L. M. Station, W.H.D., 7.iii.1968, in log, D. H. Jeffers (nr. S268). Porotop L. M. Station, W.H.D., 7.iii.1967, in log, D. H. Jeffers (nr. S264). Porotop L. M. Station, W.H.D., 15.iii.1968 in log, D. H. Jeffers (nr. S269). Marafunga 2800 m, E.H.D., 1.vi.1968, in freshly fallen log *Cryptocarya*, B. Gray (nr. S158). Marafunga 2800 m. E.H.D., 2.vi.1968, in freshly cut log *Podocarpus* sp., B. Gray (nr. S159).

PLATYPUS USTUS Schedl. fem. nov.

Female—Dark reddish brown, 4.6 mm. long, 3.5 times as long as wide.

Front flat, a very shallow transverse depression above the anterior third, opaque, minutely punctulate, indistinctly areolate-punctate, in the upper two thirds, a few fine punctures with long erect hairs at the commencement of the vertex. Antennal scape small, triangular, little wider than long.

Pronotum distinctly longer than wide (41:33), widest near the apical margin, femoral emargination short and moderately deep, disc subshining, minutely chagrined, with scattered fine punctures, a few setose ones along the anterior margin and on the sides in front, median sulcus long and fine, surrounded by a large kidney-shaped patch of densely placed fine punctures.

Elytra somewhat wider than (36:33) and 1.8 times as long as the pronotum, widest at the commencement of the declivity, sides straight and feebly divergent on the basal three-fifths, apex broadly rounded, declivity restricted to the distal third, obliquely convex; disc shining, finely striate-punctate, the striae narrow and feebly impressed near the base, somewhat deeper towards the declivity, the fine strial punctures indistinct in part, interstices moderately wide, subin punctate 3, 4 and 6 with rows of fine granules near the base, those of interstice 3 longest, a few granules also on interstice 2; short before the declivity the strial punctures somewhat larger, the oblique declivital face shining, irregularly granulate-punctate and with short pubescence.

Holotype in the Australian National Insect Collection in Canberra, one paratype in collection Schedl.

Type-locality: Papua: Brown River Timber Co. Port Moresby, 3.vii.1968, ex *Pterocymbium beccarii*, log C. Levy (Department of Forests, Konedobu, (118.34, 118.37, 118.40).

PLATYPUS UTER n. sp.

Male—Dark reddish brown, pubescence fuscous, 5.5 mm. long, 3.5 times as long as wide. A remarkable new species of the *Platypi subsulcati* with a patch of densely placed punctures around the median sulcus of the pronotum, a very steep elytral declivity, a broadly rounded and finely carinate apical margin of the elytra and the interstices regularly alternate at the commencement of the declivity.

Front wide, flat, opaque, minutely punctulate, indistinctly finely punctured, a few semi-erect setae on the antero-lateral angles, and on the sides towards and on the vertex. Antennal scape stout, but feebly wider than long.

Pronotum distinctly longer than wide (13.5:11.0), widest at the posterior extremity of the short but deep femoral emarginations, which are rectangular and pointed, disc polished, with some scattered very fine punctures, a few somewhat coarser ones bearing long setae along the anterior margin, median sulcus short and fine, surrounded by a small triangular patch of densely placed punctures.

Elytra somewhat wider (12.2:11.0) and 1.8 times as long as the pronotum widest at the middle of the declivity, apical margin very broadly rounded, declivity short, restricted to the posterior third of the elytra, very steeply convex, subperpendicular in the lower half; disc rather finely striate-punctate in the basal third, thence the striae gradually becoming strongly widened and deeply sulcate, the first interstices narrow throughout, finely serrate in the distal half, the second, fourth and sixth wide near the base becoming very low, narrow and with a few serrations behind, with a few semi-erect very short hairs at the commencement of the declivity, the first, third and fifth interstices wider, feebly carinate behind and ceasing abruptly at the declivity, declivital face convex in both directions, opaque, covered with irregularly placed warty granules, the interstices 1, 3, 5 continued on the upper third of the declivital face by densely placed and semi-erect fuscous hairs arranged like a crest, half way down in continuation of the third interstices with large humplike elevation, apical margin finely carinate up to the seven interstices, Abdomen shining, finely punctured.

Holotype in the Australian National Insect Collection in Canberra, one paratype in collection Schedl.

Type-locality: New Guinea: Karamui, Chimbu Dist., 12.vi.1968, boring into freshly fallen log. Derebe D.N. "Ebe", B. Gray (nr. S219).